

## Claims

- [1] A method for allocating reverse traffic channels at the time of handoff in a CDMA communication system comprising a control station, a serving base station and a target base station having a modem and a channel card, said method comprising the steps of:
- upon receiving a handoff request from the control station at the target base station, setting a Search Center Offset (SCO) to a Round Trip Delay (RTD) value received from the serving base station, and setting a searching area ( $S \pm \beta$ ) to an area wider than a reference searching area (S) in view of an error ( $\beta$ ) in the RTD value (step S1);
- dividing the searching area ( $S \pm \beta$ ) into a number of sub-areas, and allocating reverse traffic channels such that each of the reverse traffic channels covers its corresponding sub-area (step S2);
- monitoring the reverse traffic channels to determine whether a mobile station has been acquired by any reverse traffic channel (step S3); and
- if the mobile station has been acquired at the step S3, releasing the remaining reverse traffic channels except for the reverse traffic channel which has acquired the mobile station (step S4).
- [2] The method of Claim 1, wherein if the mobile station has not been acquired at the step S3, the method further comprises the step of reallocating reverse traffic channels such that each of the reverse traffic channels covers its corresponding sub-area and returning to the step 3 (step S5).
- [3] The method of Claim 1, wherein when allocating the reverse traffic channels at the step S2, the search center offsets and search window sizes, which are parameters of the reverse traffic channels, are set by the respective sub-areas such that the search window sizes partly overlap each other so as to cover the searching area thoroughly.
- [4] The method of Claim 3, wherein the search window size of the each reverse traffic channel is set to have a size sufficient to receive a multi-path of a base station cell coverage.